

Exploring Science and English Language Development: Implications for Teacher Professional Learning

A conference hosted by the Institute for Inquiry® at the Exploratorium - January 9th & 10th, 2015

Conference Schedule

Day 1

Session 1: Why Science is a Good Context for English Language Development?

Plenary Presentations

Conference Introduction

Lynn Rankin, Director, Institute for Inquiry, Exploratorium

Paula Hooper, Senior Science Educator and Learning Research Scientist, Exploratorium

Plenary 1: Science Learning and Language Learners

Helen Quinn, Professor Emerita of Physics

SLAC National Accelerator Laboratory, Stanford University &

Committee Chair for Conceptual Framework for New K-12 Science Education Standards

Inquiry with Exhibits: Explore Science & the Use of Language

Lynn Rankin, Director, Institute for Inquiry, Exploratorium

Paula Hooper, Senior Science Educator and Learning Research Scientist, Exploratorium

Reflections on Inquiry with Exhibits

Plenary 2: Doing Science *With* Language: Acquiring English Through Participation

Guadalupe Valdés, Bonnie Katz Tenenbaum Professor of Education, Stanford University

Sarah Capitelli, Assistant Professor, Teacher Education, University of San Francisco

Working Group Session:

What do teachers need to understand about learning science, learning language in the context of science, and pedagogy that would support both?

Report Out & Group Discussion

Session 2: Comparing Approaches to Professional Learning

Professional Learning Case Study Presentations

Case 1: We Are All Talking to Learn Science: Finding the Right Fit

Therese B. Shanahan, Science Academic Coordinator, University of California, Irvine

Lauren M. Shea, Director of Education, Outreach, and Diversity, University of California, Irvine

Case 2: The Integration of English Language Development & Inquiry Science into a Blended Lesson Design

Susan Gomez Zwiep, Associate Professor, Science Education, California State University, Long Beach

Case 3: Learning Language Within the Context of Science: Creating a Professional Development Approach

Lynn Rankin, Director, Institute for Inquiry, Exploratorium

Paula Hooper, Senior Science Educator and Learning Research Scientist, Exploratorium

Sarah Capitelli, Assistant Professor, Teacher Education, University of San Francisco

Summary Discussion of Case Studies

Cory Buxton, Professor of Education, University of Georgia

Chris Faltis, Professor, Co-Director of Teacher Education, Dolly & David Fiddymment Chair in Teacher Education
University of California, Davis

Working Group Session:

How can professional learning experiences be designed to enable teachers to create classroom practices that support learning language within the context of science?

Report Out & Group Discussion

Synthesis of the Day

Karen Worth, Chair, Elementary Education Department, Wheelock College

Annemarie Palinscar, Jean and Charles Walgreen, Jr. Professor of Reading and Literacy, University of Michigan

Day 2

Session 3: Exploring Classroom Cases: Science as a Context for English Language Development

Classroom Case Study Presentations

Case 1: Science & ELD: Providing a Context for English Language Development

Gennifer McDonald, Grade 2/3 Teacher & Academic Coordinator

El Verano Elementary School, Sonoma Valley Unified School District

Case 2: Supporting English Language Learners in Sense-Making During Science

Emily Miller, ESL/BRT Elementary Teacher

Madison Metropolitan School District

Case 3: An Interdisciplinary Approach to Supporting Language through Science

Naomi Mulvihill, Teacher and Jessie Auger, Bilingual Teacher

Rafael Hernández School, Boston Public Schools

Whole Group Sharing Session

What ideas about effective classroom practices and professional development design emerge from close examination of classroom practice?

Session 4: Supporting Professional Learning for Language in the Context of Science: District and National Perspectives

District Case Studies and National Perspective

Case 1: Sonoma Valley Unified School District

Maite Iturri, Principal, El Verano Elementary School

Louann Carlomagno, Superintendent

Case 2: Oakland Unified School District

Maria Santos, Superintendent

Claudio Vargas B, Coordinator of Elementary Science

Case 3: National Policy Perspective

Okhee Lee, Professor of Childhood Education, New York University

Synthesis of Cases and Perspectives

Mark St. John, President and Founder, Inverness Research

Andrés Henríquez, Vice President of STEM Learning in Communities at New York Hall of Science

Session 5: Developing a Research and Practice Agenda

Working Group Session:

What evidence would support the claim that science is a good context for acquiring language?

- *What do we need to know about how language develops through science?*
- *What kind of tasks, activities, professional learning experiences, etc. will ensure that language affordances are provided that will lead to engagement with and communication of science ideas?*

Report Out & Group Discussion

Synthesis & Reflections from Both Days

Kris Gutiérrez, Professor of Language, Literacy and Culture, University of California, Berkeley

Guadalupe Valdés, Bonnie Katz Tenenbaum Professor of Education, Stanford University

Final Comments & Closing Remarks

For additional information and materials related to the conference “Exploring Science and English Language Development: Implications for Teacher Professional Learning”, visit the Institute for Inquiry at exploratorium.edu/education/ifi/inquiry-and-eld.



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